

Updates on Urban Heat Island Related Activities



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EPA Urban Heat Island Webcast
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EPA's HIRI Program

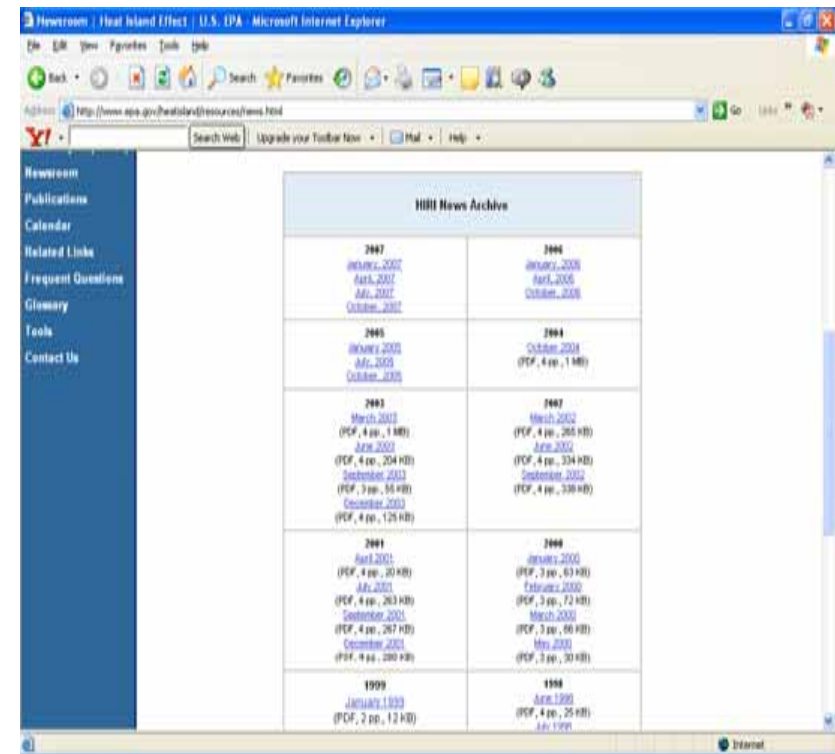
- **Build Capacity**
 - Educate -- Website, Outreach materials
 - Foster networks
 - Conferences and workshops
 - HI listserv, national UHI webcasts
- **Turn Research into Guidance**
 - MIST Energy and AQ Tool
 - Excessive Heat Events Guide
 - UHI Compendium
- **Stay Engaged, Fill Gaps**
 - Emerging Research
 - S&L Needs
 - TRB Subcommittee



Build Capacity - EPA Heat Island

Website: www.epa.gov/heatisland

- Main website for UHI information
- Revamp through Spring 2008
- Group information into 5 basic categories (currently 15)
- Add current information and relevant links on relevant pages
- Provide overview then link to more detailed downloadable file
- Revamp UHI conference call/webcast page so that subject matter is upfront vs. date of event



Turn Research into Guidance: Urban Heat Island Guidebook/Compendium

- Recent change from “guidebook” to “compendium”
- Post chapters as they become available in conjunction with website revamp
- Focus on mitigation strategies
- Also material on UHI phenomenon, mitigation activities around the U.S., relationship with global climate change



Fill Gaps: Transportation Research Board (TRB) Subcommittee

- Growing local momentum and demand for guidance on pavement choices (roofing and urban forestry/green infrastructure data available, but what about pavement?)
Most research has focused on solar reflectance
- Implementation considerations raise many issues -- need for broader and deeper approach
- Cambridge Systematics – *Cool Pavement* report – status of research and implementation activity
- June 2005 EPA Cool Pavement workshop

Fill Gaps: EPA Partnership with Arizona State University

- 2006 Partnership w/Arizona State University



- Transdisciplinary group researchers, gov't and industrial partners examining rapid urbanization impacts
- Extensive facilities for laboratory and field experiments
- Developing next generation of building and paving materials to reduce UHI impacts and address sustainability
- Materials Dbase w/thermal performance data
- Staffed call and email help center
- Education - summer institute, executive education workshops, fellowships for grad students
- Holistic approach - beyond 3 strategies

Fill Gaps: TRB AF000(2) – Paving Materials and the Urban Climate

Some Subcommittee Focus Areas:

- How pavement design and material selection contribute to surface and subsurface temperature fluctuations
- Thermal and radiative characterization of common paving materials
- Enhance pavements at the nanoscale.
- Pavement impacts beyond UHI

Some Subcommittee Activities:

- Advance the state of knowledge regarding technologies and practices to mitigate UHI impacts
- Address model and design practices, testing and standard development, technological approaches, and planning and policy considerations
- Provide a home for TRB related activities (sessions, workshops, reports, etc.)

Some Upcoming Events

- Quarterly UHI Webcasts: April, July, and October 2008
- February 7-9 New Partners for Smart Growth in Washington DC
- April 9-10 American Public Works Association Climate Change Symposium in Tempe, AZ (ASU National Center of Excellence hosting)
- April TRB Call for Papers for Paving Materials and the Urban Climate Subcommittee
- April 15-19 Association of American Geographers in Boston, MA
- April 27-May 1 American Planning Association Conference in Las Vegas, NV
- April 29-May 2 Greening Rooftops for Sustainable Communities Conference in Baltimore, MD
- *Summer 2009 Second International Workshop on Countermeasures to Urban Heat Islands in California??*

Just FYI....

- **Clean Energy-Environment Municipal Network – Launched 2007**
- **Informational and peer exchange network:**
 - Facilitate local government clean energy
 - Focus on established, cost-effective best practices
 - Serve as a Gateway to existing resources
 - Develop new tools, resources, and guidance

www.epa.gov/solar/energy-programs/state-and-local/local.html

- **Monthly webcast series starting in February 28th 2-3:30 Eastern**
- will send info to UHI listserv
- **Andrea Denny and Eva Wong**



Let's Hear from You

- Who are you?
- What's your involvement and interest in UHI-related work?
- What's going on in your community – briefly (3 minutes)?

Volunteers:

- Tucson
- ACT
- Dallas
- Others?